

What is claimed is:

1. A communication terminal device comprising:

means for establishing a connection by a call control protocol with a destination device designated by an Internet Protocol (IP) telephone number;

means for requesting a presentation of a plurality of communication protocols which the destination device can support over the connection;

means for selecting one communication protocol which the communication terminal device can support from communication protocols presented by the destination device as a response to the request by the means for requesting; and

means for communicating with the destination device over the connection by the communication protocol selected by the means for selecting.

2. The communication terminal device according to claim 1, further comprising:

means for storing a communication protocol and an IP telephone number by associating one with the other;

wherein when a communication protocol is stored in the means for storing by being associated with the IP telephone number of the destination device, the means for requesting does not request a presentation of a plurality of communication protocols which the destination device can support over the connection, and the means for selecting selects the communication protocol associated with the IP telephone number of the destination device and stored by the means for storing.

3. The communication terminal device according to claim 2, wherein when a communication protocol is not stored in the means for storing by being associated with the IP telephone number of the destination device, the means for requesting requests a presentation of a plurality of communication protocols which the destination device can support over the connection, and the means for selecting selects one communication protocol which the communication terminal device can support from the communication protocols presented from the destination device.

4. The communication terminal device according to claim 1, further comprising:

means for outputting to a prescribed destination, information indicating a failure in a communication with the destination device, when the means for selecting fails in selecting a communication protocol.

5. The communication terminal device according to claim 3, wherein when a communication protocol is not stored by being associated with the IP telephone number of the destination device, the means for storing stores the communication protocol selected by the means for selecting from the communication protocols presented from the destination device, by associating with the IP telephone number of the destination device.

6. The communication terminal device according to claim 1, wherein the plurality of communication protocols include a Simple Mail Transfer Protocol (SMTP) and a Hyper Text Transfer Protocol (HTTP).

7. The communication terminal device according to claim 1, further comprising:

means for storing a communication protocol and an IP telephone number by associating one with the other; and

means for operating by an operator;

wherein stored contents of the means for storing can be edited, added, or deleted freely by a prescribed operation from the means for operating.

8. A communication method comprising the steps of:

establishing a connection by a call control protocol with a destination device designated by an Internet Protocol (IP) telephone number;

determining whether or not a communication protocol is stored in means for storing by being associated with the IP telephone number of the destination device;

selecting a communication protocol to be used for a communication with the destination device; and

communicating with the destination device over the connection by the communication protocol selected in the step of selecting;

wherein the step of selecting comprises:

requesting a presentation of a plurality of communication protocols which the destination device can support over the connection and selecting one communication protocol which a communication terminal device can support from the communication protocols presented from the destination device as a response to the request when it is determined in the step of determining that a communication protocol is not stored; and

selecting the communication protocol stored in the means for storing by being associated with the IP telephone number of the destination device without requesting a presentation of a plurality of communication protocols which the destination device can support over the connection when it is determined in the step of determining that a communication protocol is stored.

9. A communication terminal device comprising:

means for establishing a connection by a call control protocol with a destination device designated by an Internet Protocol (IP) telephone number;

means for transmitting electronic mail to the destination device over the connection;

means for determining whether or not a connection has been established by the means for establishing; and

means for deciding a processing to be executed in accordance with a determination result of the means for determining.

10. The communication terminal device according to claim 9, further comprising:

means for transmitting the electronic mail to a prescribed electronic mail address when the means for determining determines that a connection failed to be established.

11. The communication terminal device according to claim 10, further comprising:

means for storing an IP telephone number and an electronic mail address by associating with one another;

wherein the prescribed electronic mail address is the electronic mail address stored by the means for storing by being associated with the IP telephone number of the destination device.

12. The communication terminal device according to claim 9, further comprising:

means for transmitting an IP telephone number of the communication terminal device by including in a transmission process of the electronic mail.

13. A communication method comprising the steps of:

establishing a connection by a call control protocol with a destination device designated by an Internet Protocol (IP) telephone number;

determining whether or not a connection has been established in the step of establishing; and

communicating to execute a prescribed communication process in accordance with a determination result in the step of determining;

wherein the step of communicating further comprises:

requesting a presentation of a plurality of communication protocols which the destination device can support over the connection and selecting one communication protocol which the communication terminal device can support from communication protocols presented from the destination device as a response to the request when it is determined in the step of determining that a connection has been established; and

transmitting electronic mail to a prescribed electronic mail address when it is determined in the step of determining that a connection failed to be established.

14. A communication terminal device comprising:

a first means for establishing a connection by a call control protocol with a transmitter device that called the communication terminal device; and

means for receiving electronic mail transmitted from the transmitter device over the connection.

15. The communication terminal device according to claim 14, further comprising:

a second means for establishing a connection by a call control protocol with a destination device designated by an Internet Protocol (IP) telephone number; and

means for extracting an IP telephone number from the electronic mail received by the means for receiving;

wherein the second means for establishing establishes a connection with the transmitter device designated by the IP telephone number extracted by the means for extracting, and transmits electronic mail of a reception confirmation for the electronic mail received by the means for receiving to the transmitter device over the connection.

16. The communication terminal device according to claim 14, further comprising:

means for extracting an IP telephone number from electronic mail received by the means for receiving; and

means for storing the IP telephone number extracted by the means for extracting.

17. A communication method comprising the steps of:

establishing a connection by a call control protocol with a transmitter device that called a communication terminal device;

receiving electronic mail transmitted from the transmitter device over the connection;

extracting an Internet Protocol (IP) telephone number from the electronic mail received in the step of receiving; and

transmitting to the transmitter device over a connection, electronic mail of a reception confirmation for the electronic mail received in the

step of receiving by establishing a connection with the transmitter device designated by the IP telephone number extracted in the step of extracting.

18. An electronic mail server comprising:

means for establishing a connection by a call control protocol with a destination device designated by an Internet Protocol (IP) telephone number; and

means for transmitting electronic mail by establishing a connection and designating a destination device by an IP telephone number when receiving electronic mail to be forwarded.

19. The electronic mail server according to claim 18, wherein the IP telephone number is included in the received electronic mail.

20. The electronic mail server according to claim 18, further comprising:

means for storing an electronic mail address and a telephone number by associating with one another;

wherein when a destination electronic mail address of the received electronic mail corresponds with the electronic mail address stored in the means for storing, a telephone number stored by being associated with the electronic mail address is used as the IP telephone number.

21. The electronic mail server according to claim 18, wherein the IP telephone number is decided in accordance with specific information included in communication information of the received electronic mail or electronic mail information.

22. A communication method comprising the steps of:

establishing a connection by a call control protocol by designating a destination device by an Internet Protocol (IP) telephone number when receiving electronic mail to be forwarded; and

transmitting over the connection established in the step of establishing, the electronic mail received to be forwarded.